

ENERSEARCH



Energy Technology Development

A PROGRAM FOR ONTARIO

PROPOSAL CRITERIA AND APPLICATION FORM



Ministry of Energy

Robert C. Wong Minister



What is EnerSearch?

EnerSearch is a multi-year program which provides assistance to the private sector for the research, development, testing, and initial demonstration of innovative technologies in Ontario. EnerSearch is not intended to help establish new businesses.

Activities are aimed at:

- reducing energy demand through the application of innovative technology to achieve efficient utilization of existing energy sources;
- developing innovative technology to gain additional supplies from alternative and renewable sources;
- developing the equipment and capabilities required to utilize these new energy forms;
- encouraging replication and use of new energy processes and innovative technologies among potential users.

The Ministry of Energy reserves the right to accept or reject any or all proposals.

What Activities Qualify?

EnerSearch applies to a range of activities, including:

- research and laboratory testing (proving scientific concepts);
- equipment development and testing (proving engineering processes and equipment);
- pilot plant equipment;
- full-scale field trials and technical demonstrations of innovative technologies to determine system performance, reliability and economics;
- initial demonstrations of existing technologies used outside Canada to determine their suitability for application in Ontario;
- technology and information transfer of results obtained during research, development and demonstration activities.

Note: Projects should generally be of less than 24 months duration.

What Technologies Are Eligible?

The Program applies to a range of energy technologies; examples include:

- fuel research and evaluation:
- transportation equipment;
- bio-energy conversion;
- electro-technologies;
- energy production from waste and biomass;
- residential, industrial and commercial building technologies:
- energy-efficient industrial processes;
- heat recovery and recuperation;
- hydrogen technology;
- renewable energy systems.

Who Can Participate?

Industry and professional organizations resident and doing business in Ontario, including:

- energy equipment manufacturers and suppliers;
- industrial and commercial energy users and producers;
- consulting firms;
- industrial and research organizations.

Electric utilities and publicly funded institutions are not eligible except in support of private sector proponents. As well, persons employed by government agencies and Members of Parliament are not eligible to receive funding support under this Program.

What Cost Sharing Is Available?

Program participants may anticipate an average total government contribution of 33 per cent of their projected eligible net cost. A major factor in the evaluation of proposals will be the extent of private sector financial contribution to the project.

Projects with a total government funding requirement of over 50 per cent of eligible net costs will not be considered under *EnerSearch*. In order to accurately assess the **net** private sector contributions, applicants should indicate their intentions regarding the use of federal tax credits. In the event that the proponent has applied for and received funding for this project from other provincial and federal government sources, any Ministry funding will be reduced by that amount.

For activities—i.e., demonstrations—that promise an immediate return on investment to a user, the government contribution will be limited to providing financial support consistent with the degree of risk involved.

The maximum contribution to any one project under the *EnerSearch* Program will not exceed \$500,000.

For specific research and laboratory testing projects, a funding ceiling has been set at \$200,000.

Projects which require more than the maximum assistance available under the *EnerSearch* Program may be eligible for funding under other programs. Proponents should discuss such proposals with the Ministry prior to making any written application.

Project costs incurred prior to project submission are not eligible for funding consideration under the *EnerSearch* Program.

Intellectual Property Rights

Intellectual property such as patents, industrial designs, processes, formulas, technologies, techniques, procedures, studies, inventories, test results, computer programs and software, and other information resulting from a project will normally belong to the proponent. The Ministry reserves the right to publicize reports and information arising from the project and use it in workshops and seminars, unless otherwise agreed upon.

Eligible Costs

The following costs are eligible for consideration under the Program:

- Direct project costs, including:
 - -research and development
 - -design
 - -supply and installation of equipment
 - -project management
- Performance monitoring costs
- Technology transfer costs, including publication of results to target audience, etc.

Excluded from any funding consideration will be permanent structures (i.e., buildings and plants). In addition, testing equipment, with a lifetime extending beyond the duration of the project, will be considered for partial funding assistance only. No funding support will be granted for preliminary scientific evaluations. Tooling and manufacturing activities leading to full-scale production as well as company-oriented marketing activities will equally not be eligible under *EnerSearch*.

How Does the Program Operate?

The proponent is requested to complete the following two steps:

- 1. provide adequate information as per the attached preliminary application form, which will allow the Ministry to determine initial eligibility;
- 2. after initial eligibility has been confirmed by the Ministry, submit a detailed proposal as per the guidelines defined in this brochure.

Receipt of a preliminary application will be acknowledged within ten working days. Subsequently the proponent will be contacted by a Ministry representative with a request for a detailed proposal. Upon receipt of the proposal, the Ministry representative will conduct an in-depth evaluation of the technical, economic and commercial merits. In case the proposal proves to be incomplete, the proponent will receive a detailed request for outstanding documentation.

Once all the necessary data are in place, the final evaluation of a proposal should be completed within four weeks. Approvals and contract negotiations will follow.

In order to expedite the evaluation process the proponent may choose to submit the preliminary application together with the detailed proposal.

Against Which Criteria Will Proposals Be Evaluated?

To be considered for funding assistance under the Program, proponents must meet the following criteria:

- 1. Initial Eligibility Criteria
 - Is the proponent eligible? (see Who Can Participate?)

- Have all information requirements in the preliminary application form been appropriately answered and has the applicant duly signed the application?
- Is the proposed project technologically innovative and unique? (Replications of technologies that are existing in Canada are not eligible for funding.)
- Does the proponent possess the required technical and managerial capabilities to successfully carry through the project and capitalize on its results?
- Is the necessary private sector contribution in place and will the proponent be financially strong enough to absorb any unforeseen project overruns?

2. Evaluation Criteria for Detailed Proposal

- How innovative is the proposed technology, and what are its specific advantages compared to existing technologies?
- Is the proposal technically sound?
- What is the expected energy impact, and when will it be realized?
- What is the estimated payback for the proposed project?
- What is the anticipated replication/utilization potential of the project?
- How many additional jobs will be created as a result of the project?
- Will the project result in additional investment potential for Ontario?
- Does the proposal identify specific performance criteria and monitoring procedures, and does it allow for an effective documentation of results?
- How commercially viable will the technology/ product be in terms of economic, safety and regulatory issues?
- What is the level of risk involved?
- What cost-sharing arrangement is being sought by the proponent?

These criteria will be applied in evaluating proposals and may be used in establishing priorities when selecting projects. For a research project, higher weighting will be given to potential energy impact and the proponent's technical and financial capabilities. On the other hand, for a full-scale field trial or technical demonstration of an innovative technology, marketing maturity and commercial viability will be the major criteria. In all cases, the competence of the applicant to undertake the proposed work will receive major consideration.

Proponents are therefore encouraged to undertake joint ventures with research organizations, industry organizations, etc. where such a joint venture would benefit the execution of the project and the subsequent utilization of the technology.

Detailed Proposal Content

Once initial eligibility has been established, the proponent will be asked to submit a detailed proposal as per the following guidelines:

Introductory Page: This should include your legal name for contractual purposes; project title and date of submission; point of contact within organization; approving signatures; location; total cost of work and requested funding level.

Table of Contents

Summary: The summary should be no more than one page providing a description of any one or all of the following, as necessary: research and laboratory testing; equipment development and testing; pilot plant equipment; full-scale field trial/technical demonstration; or technology and information transfer activities.

Project description: This section should provide information for each of the following areas:

 Type of Innovation (explaining why this technology is innovative, providing comparison to existing technologies and describing current and potential applications)

- Objectives (detailing project objectives, including cost/performance targets where applicable)
- Approach To Be Taken (describing how the objectives will be met, including tasks to be performed and problems to be solved)
- Commercialization/Use of Results (indicating how and by whom the innovative technology will be further developed and marketed if the objectives are successfully met—i.e., workshops and seminars for industry associations and other target audiences; publication of articles in trade journals)
- Benefits Expected (describing how the successful completion of the project will benefit the Province and the proponent—i.e., energy savings, economic viability, replication potential, estimated job creation and investment potential in Ontario)
- Need for Assistance (explaining why the proposed work is not likely to start, or will be delayed, without the Ministry's support).

Technical Details: There should be sufficient information to allow a thorough evaluation of the project's scientific merits and technical feasibility, including:

- a concise description of the basic scientific principles involved;
- plans, drawings, formulas and supporting documents;
- any patents applied for, or any existing patents, that may impede commercialization;
- a description of any related technical problems and how they will be overcome;
- monitoring, evaluation and documentation plans, including information technology transfer plans;
- a project management plan broken down into phases or component tasks.

Project Management: This section should establish the proponent's ability to manage the proposed work within time and budget constraints, including a description of:

• the project's organization and management, and the name of the project manager;

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- subcontracting arrangements or use of outside services;
- plans for facilities, personnel allocation and materials procurement;
- type and frequency of status reports;
- estimated project schedule.

Project Budget and Financing: This section should provide a breakdown of estimated budget total and financing avenues for the proposed project, spelling out in detail the following categories:

- salaries and wages;
- materials and equipment (more than \$2,000 each);
- subcontract costs;
- other expenses.

In particular, proponents are required to clearly indicate (l) whether they will be claiming federal tax credits, (2) whether any federal government grant has been sought/received, and (3) if appropriate, what capital cost allowance schedule they are planning to use.

What Are the Terms of Payment?

Payments will be adjusted to suit the needs of the project but will generally be made when mutually agreed to milestones have been reached.

Enquiries and Proposal Submission

All enquiries and proposals should be addressed to:

EnerSearch Program Officer Ministry of Energy Energy Programs and Technology Division 8th Floor, 56 Wellesley Street West Toronto, Ontario M7A 2B7

Telephone: 416-965-3246 416-965-1936

Outside the Toronto area call operator toll free and ask for Zenith 80420.

Preliminary Application for EnerSearch Funding

The following information requirements represent a minimum level only and are designed to help us in determining initial eligibility. Proponents will subsequently be contacted by a Ministry representative to request a detailed proposal as per Ministry guidelines.

Proponent Information		
Name of Applicant:		
Project Title:		
Submission Date:		
Contact within Organization:		_Tel.:
Address:		
Total Project Cost:	Requested Funding	
□ Partnership	☐ Equipment manu	facturer/supplier
□Company	□ Energy user	
☐ Joint venture	☐ Energy producer	
☐ Subsidiary; indicate	□ Consulting firm	
parent company	☐ Research organization	ation
	Project Summary	
Synopsis of Project:		Pr.
	*	,
Project Type:		
☐ Research and laboratory testing	☐ Pilot plant equipment	☐ Technology/information
☐ Equipment development	☐ Full-scale field trial/ technical demonstration	transfer



Ministry Robert C. Wong of Minister Energy

Project Description		
1—Type of Innovation (explaining why this technology is innovative, providing comparison to existing technologies and describing current and potential applications)		
2—Objectives (detailing project objectives, including cost/performance targets where applicable)		
3—Approach To Be Taken (describe how objectives will be met, including tasks to be performed and problems to be solved)		

4—Commercialization/Use of Results (indicate how and by whom the technology will be further developed and marketed if objectives are successfully met)	
5—Benefits Expected (describe how the successful completion of the project will benefit the Province and the proponent—i.e., energy impact, environmental impact, job creation, etc.)	
6a) - Need for Assistance (explain why the proposed work is not likely to start, or will be delayed, without the Ministry's support)	
6b) – Indicate whether you would allow the federal department of Energy, Mines & Resources to evaluate the proposal for possible federal/provincial cost sharing. Yes No	

Propone	ent Competence
1—Technical and Managerial Capability (describe ensure successful completion of the project; attac	e the necessary technical and managerial strengths to h resumés for key personnel)
2—Financial Capability (identify financial resource capitalize on the results; attach annual report or o	ther supporting data)
Project Budget,	Financing and Timing
Subcontract costs Other expenses (specify). BUDGET TOTAL. Deduct federal tax credits PROPONENT'S NET COST. Proponent's contribution. Requested funding under EnerSearch A detailed breakdown and explanation for individ	dual line items must be attached. government grants have been sought/received for this ent from other private sector sources
Major milestones: (description and date of work to	Completion
I certify that the information given in this application this project are disclosed in this application.	tion is accurate in all respects. All funding sources for
Signature:	Printed Name:
Position:	Date:



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Submission Date:		
Contact within Organization:		_Tel.:
Address:		
Total Project Cost:	Requested Funding	7.
□ Partnership	☐ Equipment manufacturer/supplier	
Company	□ Energy user	
☐ Joint venture	☐ Energy producer	
☐ Subsidiary; indicate	☐ Consulting firm	
parent company	☐ Research organiz	zation
	Project Summary	
Synopsis of Project:		
Project Type:		
☐ Research and laboratory testing	☐ Pilot plant equipment	☐ Technology/information
☐ Equipment development	☐ Full-scale field trial/ technical demonstration	transfer



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Project Budget, Financing and Timing	
Total materials and equipment Subcontract costs Other expenses (specify). BUDGET TOTAL. Deduct federal tax credits PROPONENT'S NET COST. Proponent's contribution. Requested funding under EnerSearch A detailed breakdown and explanation for individu Indicate whether any other provincial or federal go project (all line items must be attached. overnment grants have been sought/received for this at from other private sector sources st allowance schedule are you planning to use?
(description and date of work to	
I certify that the information given in this application this project are disclosed in this application.	on is accurate in all respects. All funding sources for
Signature:	Printed Name:
Position:	_ Date:

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